

52. Pickling Shed east of CPP-631.

| | INITIAL | ASSESSMEN' | r FORM | | | | |
|-------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------|------------------|----------|-----------------------------------------|---------------------------------------|
| . SITE NAME AND LOCAT | ION | - | | | | | |
| 01 SITE NAME Pickling shed east of CPP-631. O2 ADDRESS Idaho National Engineerin Laboratory (INEL) | | | | | | neering | |
| 03 CITY Scoville | | 04 STATE Idaho | , | P CODE 403 | l | OUNTY tte | |
| 09 COORDINATES: NORTH | EA | ST | 07 CO | UNTY CO | DE 08 | CONG. D | IST. |
| 69525 | 0 29 | <u>6 6 0 0</u> | | | | | |
| 10 DIRECTIONS TO SITE (N. on Lincoln Blvd.; | | | | lic roa | ad) | | |
| II. OWNER/OPERATOR | | - | | | | | |
| 01 OWNER (If known) Department of Energy | (DOE) | 02 STRE | ET ADD | | | , , , , , , , , , , , , , , , , , , , , | |
| 03 CITY Idaho Falls | | 04 STATI | | ZIP COI 3402 | OE 06 | TELEPHON (208) 52 | |
| 07 OPERATOR (If known) Westinghouse Idaho N | uclear Co. | 08 STRE | ET ADD Box 4 | | | | |
| J9 CITY Idaho Falls | | 10 STAT | 4 | ZIP COI 83403 | DE 12 | TELEPHON (208) 52 | |
| III. CHARACTERIZATION O | F POTENTIA | L HAZARD | | | <u> </u> | | |
| 01 ON SITE INSPECTION | _x YES | ио | DATE | 7 /10 | 0 /86 | | · · · · · · · · · · · · · · · · · · · |
| 02 SITE STATUS (Check o | | | | | | 1954 | HAZ WASTE |
| A. Active SWMU _x | B. Inacti | ve C. | Unkno | wn Sta | art | Stop | Unknown |
| 04 DESCRIPTION OF SUBST See Waste Information | | SIBLY PRES | ENT, K | MOWN, | OR ALI | ÆGED | |
| 05 DESCRIPTION OF POTEN See Hazardous Conditio | | | | T AND/ | OR POP | PULATION | |
| IV. INFORMATION AVAILAB | LE FROM | | | | | | |
| 01 CONTACT Clifford Clark | 02 OF (Age DOE | ency/Org.) | | 0: | | PHONE NU. 526-112 | |
| 04 PERSON RESPONSIBLE FOR ASSESSMENT D. Joan Poland | 05 AG | ENCY | 06 OR N&I | | | ELEPHONE | |
| 8 DATE 10 /16 /86 Mon Day Year | | | | | | | |

| WASTE INFORMATION | | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------|---------------------|---------|---------------|--|--|
| I. WASTE STATES, QUANTITIES, AND CHARACTERISTICS | | | | | | | |
| 01 PHYSICAL STATES (Check all that apply) | | | | | | | |
| 03 WASTE CHARACTERISTICS (Check all that apply) _A. ToxicD. PersistentG. FlammableJ. Explosive _XB. CorrosiveE. SolubleH. IgnitableK. Reactive _C. RadioactiveF. InfectiousI. Highly VolatileL. Incompatible M. Not Applicable | | | | | | | |
| ···· | TYPE | | | | | | |
| CATEGORY SLU OLW SOL PSD OCC IOC ACD BAS MES | SUBSTANCE NAME Sludge Oily Waste Solvents Pesticides Other organic chemical Inorganic chemicals Acids Bases Heavy metals | | S AMOUNT | O2 UNIT | COMMENTS | | |
| III. HAZAR | DOUS CONSTITUENTS | | | | | | |
| Ol CATEGOR ACD | Y 02 SUBSTANCE 03 C | AS 04 BER S | STOR/DISE METHOD | O5 CONC | C. 06 MEASURE | | |
| 711 001111 | TO OF THEODINATON | | | | | | |
| IV. SOURCES OF INFORMATION Use specific references, e.q., state titles, sample analysis reports, etc.) Site inspections, personnel interviews, process records, laboratory records. | | | | | | | |

| *************************************** | HAZARDOUS CONDITIONS AND INCIDENTS |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | HAZARDOUS CONDITIONS AND INCIDENTS |
| | A. GROUNDWATER CONT. 02 OBSERVED (Date) POTENTIAL NARRATIVE DESCRIPTION: ALLEGED Not Applicable |
| ll . | B. SURFACE WATER CONT. |
| 01 03 | C. CONTAMINATION OF AIR 02 OBSERVED (Date) POTENTIAL POPULATION POTENTIALLY AFFECTED 04 NARRATIVE DESCRIPTION ALLEGED Not Applicable |
| | D. FIRE/EXPLOSIVE CONDITIONS 02 OBSERVED (Date) POTENTIAL POPULATION POTENTIALLY AFFECTED 04 NARRATIVE DESCRIPTION ALLEGED Not Applicable |
| | E. DIRECT CONTACT 02 OBSERVED (Date) POTENTIAL POPULATION POTENTIALLY AFFECTED 04 NARRATIVE DESCRIPTION ALLEGED Not Applicable |
| 03 Th | <u>x</u> F. CONTAMINATION OF SOIL 02 <u>OBSERVED (Date) x POTENTIAL NARRATIVE DESCRIPTION: ALLEGED volume of potentially contaminated soil is approximately 10 cic yards.</u> |
| | G. DRINKING WATER CONTAMINATION 02 OBSERVED (Date) POTENTIAL NARRATIVE DESCRIPTION: ALLEGED Not Applicable |

| HAZARDOUS CONDITIONS AND INCIDENTS |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I. HAZARDOUS CONDITIONS AND INCIDENTS (Continued) |
| 01 J. DAMAGE TO FLORA 02 OBSERVED (Date) POTENTIAL 04 NARRATIVE DESCRIPTION: ALLEGED Not Applicable |
| 01 K DAMAGE TO FAUNA 02 OBSERVED (Date) POTENTIAL 04 NARRATIVE DESCRIPTION: (include name(s) of species) ALLEGED Not Applicable |
| 01 L. CONTAMINATION OF FOOD CHAIN 02 OBSERVED (Date) POTENTIAL 04 NARRATIVE DESCRIPTION: ALLEGED Not Applicable |
| 01 M. UNSTABLE CONTAINMENT OF WASTES 02 OBSERVED (Date)POTENTIAL (SPILL RUNOFF, STANDING LIQUIDS/LEAKING DRUMS) 03 NARRATIVE DESCRIPTION: ALLEGED Not Applicable |
| 01 N. DAMAGE TO OFFSITE PROPERTY 02 OBSERVED (Date) POTENTIAL 04 NARRATIVE DESCRIPTION: ALLEGED Not Applicable |
| 01 O. CONTAMINATION OF SEWERS,STORM 02 OBSERVED(Date) POTENTIAL DRAINS, WWTPS 04 NARRATIVE DESCRIPTION: ALLEGED Not Applicable |
| 01 P. ILLEGAL/UNAUTHORIZED DUMPING 02 OBSERVED (Date) POTENTIAL 04 NARRATIVE DESCRIPTION: ALLEGED Not Applicable |
| 05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL OR ALLEGED HAZARDS |
| III. COMMENTS None |
| IV. SOURCES OF INFORMATION (List specific references, e.g., state titles, sample analysis, reports) Site inspections, personnel interview, disposal quantity records and Installation Assessment Report. |
| |

| PRIORITY RANKING SYSTEM | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| I. GENERAL FACILITY INFORMATION | | | | |
| FACILITY NAME: <u>CPP Pickling Shed</u> LOCATION: <u>East of CPP-631</u> POINT OF CONTACT: NAME: | | | | |
| ADDRESS: | | | | |
| REVIEWER: 4 Joan Poland DATE: 10/30/86 | | | | |
| II. GENERAL FACILITY DESCRIPTION | | | | |
| GENERAL DESCRIPTION OF THE FACILITY: (For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of facility; contamination route of major concern; types of information needed for rating; agency action, etc.) During original CPP construction, a pickling that we will be the treat pipes of atternation of the construction of the construction of information needed for rating; agency action, etc.) Literatural materials with mineral acids. Spent solution were disposed of to the liquid was torned to the treat of the constructions. This temporary structure was torned around 1954. | | | | |
| III. SCORES | | | | |
| SM = 6.6 (Sgw= 11.5 Ssw= 0 Sa= 0) $SFE = 0$ $SDC = 0$ | | | | |

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| GROUND WATER ROUTE WORKSHEET | | | | | | |
|-----------------------------------------------------------------------------------------------------------|------------------------|-----------------------------|-----------------|---------|---------------|-----------------|
| RATING | FACTOR | ASSIGNED VALUE (Circle one) | MULTI- PLIER | SCORE | MAX. SCORE | REF. Section |
| | | | | | | 3.2 |
| 1.ROUTE CHA Depth to A Conce | _ | <u> </u> | 2 | | 6 | |
| Net Precip Permeabil | | | 1 | | 3 3 | |
| Physical S | | 0 1 2 3 | 1 | | 3 | _ |
| | Total Route | Characteristics Score | | 5 | 15 | |
| 2.CONTAINM | 2.CONTAINMENT 0 1 2(3) | | · 1 | 3 | 3 | 3.3 |
| 3.WASTE CHARACTERISTICS Toxicity/Persistence Hazardous Waste Quantity 0 3 6 9 12 15 18 0 1 2 3 4 5 6 7 8 | | 1 | | 18 8 | , 3.4 | |
| | Total Waste | Characteristics Score | | 9 | 26 | |
| 4. Multi | | 135 | 1170 | | | |
| 5. Divide line 4 by 1170 and multiply by 100 Sgw= //.5 | | | | | | |

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| SURFACE WATER ROUTE WORKSHEET | | | | | |
|-------------------------------------------------------------------------------|---------------------------------------|-----------------|----------|---------------|-----------------|
| RATING FACTOR | ASSIGNED VALUE (Circle one) | MULTI- PLIER | SCORE | MAX. SCORE | REF. Section |
| | <u> </u> | | <u>*</u> | . | 4.2 |
| 1.ROUTE CHARACTERISTIC Facility Slope and | <i>⊙</i> ∕1 2 3 | 1 | | 3 | |
| Intervening Terrain 1-yr. 24-hr. Rainfall Distance to Nearest Surface Water | | 1 2 | | 3 6 | |
| Physical State | 0 1 2 3 | 1 | | 3 | |
| Total Rout | e Characteristics Score | | 8 | 15 | |
| 2. CONTAINMENT (0) 1 2 3 | | 1 | 0 | 3 | 4.3 |
| 3.WASTE CHARACTERISTIC Toxicity/Persistence Hazardous Waste Quantity | 0 3 6 9 12 15 18 0 1 2 3 4 5 6 7 8 | 1 | | 18 8 | . 4.4 |
| Total Waste | Characteristics Score | - | 9 | 26 | |
| 4. Multiply lines 1 | x 2 x 3 | | 0 | 1170 | |
| 5. Divide line 4 by 1 | 170 and multiply by 100 | Ssw= (| D | • | |

| AIR ROUTE WORKSHEET | | | | | | |
|------------------------------------------------------|--------------------|--------------------------------------------|-----------------|-------|---------------|-----------------|
| RATING | FACTOR | ASSIGNED VALUE (Circle one) | MULTI- PLIER | SCORE | MAX. SCORE | REF. Section |
| 1.HISTORIC | RELEASE | 0 45 | 1 | 0 | 45 | 5.1 |
| Date and | Location: | See attached supplement | pages | | | |
| | | Sa = 0. Enter on line 5 proceed to line 2. | | | | |
| Reactivity | RACTERISTICS and | 0 1 2 3 | 1 | | 3 | 5.2 |
| Toxicity Hazardous Waste Quantity | | 0 1 2 3 0 1 2 3 4 5 6 7 8 | 3 1 | | 9 8 | |
| | Total Waste | Characteristics Score | | | 20 | · |
| 4-mile R | adius | 0 9 12 15 18 21 24 27 30 | 1 | | 30 | 5.3 |
| Distance t Environm | o Sensitive ent | | 2 | | 6 | |
| Land Use | | 0 1 2 3 | 1 | | 3 | |
| | Total Targe | t Scores | | | 39 | |
| 4. Multip | ly lines 1 x | 2 x 3 | | | 35100 | |
| 5. Divide line 4 by 35100 and multiply by 100 Sa = 0 | | | | | | |

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| | s | 2 S |
|------------------------------------------------------------------------------|------|--------|
| GROUNDWATER ROUTE SCORE (Sgw) | 11.5 | 132.3 |
| SURFACE WATER ROUTE SCORE (Ssw) | 0 | 0 |
| AIR ROUTE SCORE (Sa) | 0 | 0 |
| 2 2 2 Sgw + Ssw + Sa | | 132.3 |
| 2 2 2 SQR(Sgw + Ssw + Sa) | | 11.5 |
| $\frac{2}{\text{SQR}(\text{Sgw} + \text{Ssw} + \text{Sa})/1.73} = \text{SM}$ | | 6.6 |

DOCUMENTATION RECORDS FOR HAZARD RANKING SYSTEM

INSTRUCTIONS: As briefly as possible, summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference. Include the location of the document.

| FACILITY NAME: CPP Pickling Shed | |
|-------------------------------------------------------------------------|----|
| LOCATION: East of CPP-631 | |
| DATE SCORED: 10/20/86 | |
| PERSON SCORING: D. Jon Polad | |
| PRIMARY SOURCE(S) OF INFORMATION: Sete inspections and personnel intern | uw |

FACTORS NOT SCORED DUE TO INSUFFICIENT INFORMATION:

COMMENTS OR QUALIFICATIONS:

GROUNDWATER ROUTE

| 1. | OBSERVED RELEASE - Undertake Corrective Action |
|----|----------------------------------------------------------------------------------------------------------------------------------|
| | Contaminants detected (3 maximum): |
| | None |
| | Rationale for attributing the contaminants to the facility: |
| | |
| | |
| 2. | ROUTE CHARACTERISTICS |
| | Depth to Aquifer of Concern |
| | Name/description of aquifer(s) of concern: Snake Kiner Plain Aquifer |
| | Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern: |
| | 450 ft. |
| | |
| | Depth from the ground surface to the lowest point of waste disposal/ storage: |

Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

9.07 inches

Mean annual lake or seasonal evaporation (list months for seasonal):

36 inches

Net precipitation (subtract the above figures):

- 26.93 inches

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

An interbedded sequence of basaltic lava flows and sedimentary deposits.

Permeability associated with soil type:

 10^{-7} to 10^{-3} cm/sec

Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Nane

Method of highest score:

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

Acids

Compound with highest score:

Acids

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of O (Give a reasonable estimate even if quantity is above maximum):

No records of types or quantities of acids. No records of any spills or leakage. Area has been reused. Basis of estimating and/or computing waste quantity:

See About.

Checklist for Groundwater Releases

| <u>Ide</u> | ntify | ing R | elease | Yes | <u>No</u> |
|------------|-------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------|
| 1. | Pote | ntial | for Groundwater Releases from the Unit | | |
| | 0 | Unit | type and design | | |
| | | - | Does the unit type (e.g., land-based) indicate the potential for release? | <u>/</u> | _ |
| | | - | Does the unit have engineered structures (e.g., liners, leachate collection systems, proper construction materials) designed to prevent releases to groundwater? | - | <u>/</u> |
| | a | Unit | operation | | |
| | | - | Does the unit's age (e.g., old unit) or operating status (e.g., inactive, active) indicate the potential for release? | ***** | → · |
| | | • | Does the unit have poor operating procedures that increase the potential for release? | | <u> </u> |
| | | • | Does the unit have compliance problems that indicate the potential for a release to groundwater? | _ | <u> </u> |
| | o | Phys | ical condition | | |
| | | - | Does the unit's physical condition indicate the potential for release (e.g., lack of structural integrity, deteriorating liners, etc.)? | - | <u>/</u> |
| | 0 | Loca | tional characteristics | | |
| | | - | Is the unit located on permeable soil so the release could migrate through the unsaturated soil zone? | V | |
| | | • | Is the unit located in an arid area where the soil is less saturated and therefore a release has less potential for downward migration? | <u> </u> | |
| | | • | Does the depth from the unit to the uppermost aquifer indicate the potential for release? | _ | <u>/</u> |

Checklist for Groundwater Releases

| | | | | <u>Yes</u> | No |
|------|------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------|
| | | - | Does the rate of groundwater flow greatly inhibit the migration of a release from the facility? | <u> </u> | • |
| | | • | Is the facility located in an area that recharges surface water? | | |
| | 0 | Wast | characteristics · | | |
| | | - | Does the waste in the unit exhibit high or moderate characteristics of mobility (e.g., tendency not to sorb soil particles or organic matter in the unsaturated zone)? | _ | _ |
| | | - | Does the waste exhibit high or moderate levels of toxicity? | _ | _ |
| 2. | Evid | ence (| of Groundwater Releases | | |
| | 0 | Exis | ting groundwater monitoring systems | | / |
| | | - | Is there an existing system? | | _ |
| | | • | Is the system adequate? | _ | <u> </u> |
| | | - | Are there recent analytical data that indicate a release? | | <u>/</u> |
| | 0 | Other | r evidence of groundwater releases | | |
| | | - | Is there evidence of contamination around the unit (e.g., discolored soils, lack of or stressed vegetation) that indicates the potential for a release to groundwater? | | V |
| | | - | Does local well water or spring water sampling data indicate a release from the unit? | _ | <u> </u> |
| | | | he Relative Effect of the Release on Human e Environment | | |
| 1. | Expo | sure | Potential | | |
| | 0 | Cond | itions that indicate potential exposure | | |
| | | - | Are there drinking water well(s) located near the unit? | _ | <u>/</u> |
| 1198 | | - | Does the direction of groundwater flow in- dicate the potential for hazardous constitu- ents to migrate to drinking water wells? | | / |

SURFACE WATER ROUTE

1. OBSERVED RELEASE - Undertake Corrective Action

Contaminants detected in surface water at the facility or downhill from it (3 maximum):

None

Rationale for attributing the contaminants to the facility:

2. ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

0.04%

Name/description of nearest downslope surface water:

Big Lost River

Average slope of terrain between facility and above cited surface water body in percent:

0.07%

Is the facility locater either totally or partially in surface water?

No

Is the facility completely surrounded by areas of high elevation?

No

1-year 24-Hour Rainfall in Inches

less than 2 inches

Distance to Nearest Downslope Surface Water

1,750

Physical State of Waste

Contamenated Soil

3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

None

Method with highest score:

| | | | | <u>Yes</u> | No |
|-------------|--------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|
| <u>Ider</u> | itifyi | ng Re | <u>leases</u> | | |
| 1. | | | for Surface Water/Surface Drainage Release acility | | |
| | 0 | Proxi Recep | mity to Surface Water and/or to Off-site tors | | |
| | | | Could surface run-off from the unit reach the nearest downgradient surface water body? | | $\sqrt{}$ |
| | | | Could surface run-off from the unit reach off-site receptors (e.g., if facility is located adjacent to populated areas and no barrier exists to prevent overland surface run-off migration)? | _ | / |
| | 0 | Relea | se Migration Potential | | |
| | | | Does the slope of the facility and inter- vening terrain indicate potential for release? | | <u> </u> |
| | | - | Is the intervening terrain characterized by soils and vegetation that allow overland migration (e.g., clayey soils, and sparse vegetation)? | | _ |
| | | - | Does data on one-year 24-hour rainfall indicate the potential for area storms to cause surface water or surface drainage contamination as a result of run-off? | | <u>√</u> |
| | Q | Unit | Design and Physical Condition | | |
| | | - | Are engineered features (e.g., run-off control systems) designed to prevent release from the unit? | _ | <u> </u> |
| | | - | Does the operational history of the unit indicate that a release has taken place (e.g., old, closed or inactive unit, not inspected regularly, improperly maintained)? | | 1 |
| • | | - | Does the physical condition of the unit indicate that releases may have occurred (e.g., cracks or stress factures in tanks or erosion of earthen dikes of surface impoundments)? | | <u>/</u> |

Checklist for Surface Water/Surface Drainage Releases

| | | | <u>Yes</u> | <u>No</u> |
|----|------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|
| | 0 | Waste Characteristics | | |
| | | Is the volume of discharge high relative to the size and flow rate of the surface water body? | _ | <u> </u> |
| | | Do constituents in the discharge tend to sorb to sediments (e.g., metals)? | | / |
| | | Do constituents in the discharge tend to be transported downstream? | _ | 1 |
| | | Do waste constituents exhibit moderate or high characteristics of persistence (e.g., PCBs, dioxins, etc.)? | _ | |
| | | Do waste constituents exhibit moderate or high characteristics of toxicity (e.g., metals, chlorinated pesticides, etc.)? | <u>/</u> | |
| 2. | Evid | ence of Surface Water/Surface Drainage Releases | | |
| | 0 | Are there unpermitted discharges from the facility to surface water that require an NPDES or a Section 404 permit? | | |
| | a | Is there visible evidence of uncontrolled run-off from units at the facility? | | |
| | | ing the Relative Effect of the Release on Human | | |
| 1. | 0 | Are there drinking water intakes nearby? | | |
| | a | Could human and/or environmental receptors come into contact with surface drainage from the facility? | - | <u> </u> |
| | • | Are there irrigation water intakes nearby? | • | _ |
| | 0 | Could a sensitive environment (e.g., critical habitat, wetlands) be affected by the discharge (if it is nearby)? | | <u> </u> |

| 1. | OBSERVED RELEASE |
|----|---------------------------------------------------------|
| | Contaminants detected: |
| | None |
| | |
| | Date and Location of detection of contaminants: |
| | |
| | |
| | Methods used to detect the contaminants: |
| | |
| | Rationale for attributing the contaminants to the site: |
| | Rationale for attributing the containments to the site. |
| | |
| | |
| 2. | WASTE CHARACTERISTICS |
| | Reactivity and Incompatibility |
| | Most reactive compound: |
| | None |

Most incompatible pair of compounds:

<u>Toxicity</u>

Most toxic compound:

See#4 Page 4

Hazardous Waste Quantity

Total quantity of hazardous waste:

See #4 Page 4

Basis of estimating and/or computing waste quantity:

See #4 Page 4

| | | | | Yes | No. |
|----|-------|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------|
| de | ntify | ing R | <u>eleases</u> | | |
| • | Pater | itial | for Air Releases from the Facility | . 3 | |
| | 0 | Unit | Characteristics | • | |
| | | - | Is the unit operating and does is expose waste to the atmosphere? | | _/ |
| | | - | Does the size of the unit (e.g., depth and surface area) create a potential for air release? | _ | \checkmark |
| | 0 | | the unit contain waste that exhibits a rate or high potential for vapor phase ase? | | |
| | | - | Does the unit contain hazardous constituents of concern as vapor releases? | *************************************** | |
| | | - | Do waste constituents have a high potential for volatilization (e.g., physical form, concentrations, and constituent-specific physical and chemical parameters that contribute to volatilization)? | | <u>'</u> |
| | ٥ | cond ⁴ | the unit contain waste and exhibit site itions that suggest a moderate or high atial for particulate release? | | |
| | | - | Does the unit contain hazardous constituents of concern as particulate releases? | | <u>/</u> |
| | | - | Do constituents of concern as particulate releases (e.g., smaller, inhalable particulates) have potential for release via wind erosion, reentrainment by moving vehicles, or operational activities? | _ | <u>\lambda</u> |
| | | ~ | Are particulate releases comprised of small particles that tend to travel off-site? | _ | _ |
| | o | | ertain environmental and geographic factors the concentrations of airborne contaminant. | ś? | |
| | | - | Do atmospheric/geographic conditions limit constituent dispersion (e.g., areas with atmospheric conditions that result in inversions)? | | <u>/</u> |
| | | - | Is the facility located in a hot, dry area? | <u> </u> | |

Checklist for Air Releases

| | | | | res | NO |
|-----|----|-------|------------------------------------------------------------------------------------------------------|-----|-------------|
| 2 | 2. | Evide | ence of Air Releases | | |
| . • | | o . | Does on-site monitoring data show that releases have occurred or are occurring (e.g., OSHA data)? | | $\frac{}{}$ |
| | | 0 | Have particulate emissions been observed at the site? | _ | <u> </u> |
| | | 0 | Have there been citizen complaints concerning odors or observed particulate emissions from the site? | | <u>/</u> |
| | | | ing the Relative Effect of the Release on Human | | |
| 1 | L. | Expos | sure Potential | | |
| | | o | Is a populated area located near the site? | | |

Checklist for Subsurface Gas Releases

| | | | <u>Yes</u> | No |
|------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------|
| <u>Ide</u> | ntif <u>y</u> | ing a Release | | |
| 1. | Pote | ntial for Subsurface Gas Releases | • | |
| | 0 | Does the unit contain waste that generates methane or generates volatile constituents that may be carried by methane (e.g., decomposable refuse/volatile organic wastes)? | | $\sqrt{}$ |
| | 0 | Is the unit an active or closed landfill or a unit closed as a landfill (e.g., surface impoundments and waste piles)? | © Marries (Sept. | <u> </u> |
| 2. | | ation of Subsurface Gas to On-site or Off-site dings | | |
| | 0 | Are on-site or off-site buildings close to the unit? | | \checkmark |
| | | Do natural or engineered barriers prevent gas migration from the unit to on-site or off-site buildings (e.g., low soil permeability and porosity hydrogeologic barriers/liners, slurry walls, gas control systems)? | | V |
| | O | Do natural site characteristics or man-made structures (e.g., underground power trans-mission lines, sewer pipes/sand and gravel lenses) facilitate gas migration from the unit to buildings? | _ | <u> </u> |
| | | ing the Relative Effect of the Release on Human | | |
| 1. | Ехро | sure Potential | | |
| | 0 | Does building usage (e.g., residential, commercial) exhibit high potential for exposure? | | / |

| 1 | (| ١ | 11 | N. | TΔ | ιŢ | M | М | F | ٨ | IT | ۰ |
|---|---|---|----|----|----|----|---|---|---|---|----|---|

Hazardous substances present:

See#4 Page 4

Type of containment, if applicable:

2. WASTE CHARACTERISTICS

Direct Evidence

Type of instrument and measurements:

None

<u>Ignitability</u>

Compound used:

None

Reactivity

Most reactive compound:

None

Incompatibility

Most incompatible pair of compounds:

None

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

See# 4 Page 7

Basis of estimating and/or computing waste quantity:

See #4 Page 4

3. TARGETS

Distance to Nearest Population

Distance to Nearest Building

50ft.

Distance to Sensitive Environment

Distance to wetlands:

Greater than 100 feet

Distance to critical habitat:

Greater than 1/2 mile

Land Use

Distance to commercial/industrial area, if 1 mile or less:

The INEL is a research facility. There are no commercial/ industrial facilities within 1 mile.

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Greater than 2 miles

Distance to residential area, if 2 miles or less:

Greater than 2 miles

Distance to agricultural land in production within past 3 years, if 1 mile or less:

Greater than 1 mile

Distance to prima agricultural land in production within past 3 years, if 2 miles or less:

Greater than 2 miles

If a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

Big Southern Butte

Population Within 2-Mile Radius

1828

Buildings Within 2-Mile Radius

189

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Date, location, and pertinent details of incident:

None

2. ACCESSIBILITY

Describe type of barrier(s):

None

3. CONTAINMENT

Type of containment, if applicable:

None

4. WASTE CHARACTERISTICS

<u>Toxicity</u>

Compounds evaluated:

See #4 Poge 4

Compound with highest score: See # 4 Page 4

5. TARGETS

Population within one-mile radius

1367

Distance to critical habitat (of endangered species)

Greater than 1 mile